

Abstract

A stabilizer system provides leveling for a towed harvester vehicle. The harvester includes a hitch having a gimbal mounting to the tractor. The subframe is utilized to accommodate the gimbal and provides for utilizing the mass of the tractor to react to the stabilizer system leveling forces. The harvester utilizes telescoping assemblies that are placed intermediate the hitch and the frame as well as between the axle and the frame. The telescoping assemblies retract and extend to varied positions and provide correction. Flow to extend and retract the telescoping assemblies is provided through a proportional pendulum type valve that increases flow as needed when tilted from horizontal. The flow is increased and decreased in proportion to the amount of tilting from the home vertical position.